



Portable Fire Extinguishers: OSHA Standard 1910.157¹

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This document, a condensation of Standard 1910.157 of the Occupational Safety and Health Act, is not intended to be totally inclusive but rather to highlight the information and requirements in the complete OSHA standard that owners and managers of agricultural businesses should understand.

The requirements of this standard apply to the placement, use, maintenance and testing of portable fire extinguishers provided for the use of employees. The section "Selection and Distribution" does not apply to extinguishers provided for employee use on the outside of workplace buildings or structures. Where extinguishers are provided but are not intended for employee use and the employer has an emergency action plan and a fire prevention plan, then only the requirements of the section "Inspections, Maintenance and Testing" and the section "Evidence of Testing" apply.

EXEMPTIONS

- Where the employer has established and implemented a written fire safety policy which 1) includes an emergency action plan and a fire prevention plan, and 2) requires the immediate and total evacuation of employees from the workplace upon the sounding of a fire alarm, and *when extinguishers are not available in the workplace*, the employer is exempt from all requirements of this standard (unless a specific OSHA standard requires that a portable fire extinguisher be provided).

- Where the employer has an emergency action plan which designates only certain employees to be authorized to use the portable fire extinguishers, and which requires all other employees in the fire area to immediately evacuate the affected work area upon the sounding of the fire alarm, the employer is exempt from the distribution requirements in the section "Selection and Distribution."

GENERAL REQUIREMENTS

When the employer must provide portable fire extinguishers they must be approved, and they must be mounted, located and identified in such a manner that they are readily and safely accessible to employees.

The employer must:

- assure that portable fire extinguishers are maintained in a fully charged and operable condition and kept in their designated places at all times except during use,
- permanently remove from service all soldered or riveted shell self-generating soda acid, or self-generating foam or gas cartridge water type portable fire extinguishers, which are operated by inverting the extinguisher to rupture the cartridge or which initiate an uncontrollable chemical reaction to expel the agent, and

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- *not* provide or make available in the workplace portable fire extinguishers using carbon tetrachloride or chlorobromomethane extinguishing agents.

SELECTION AND DISTRIBUTION

When portable fire extinguishers must be provided for employee use, they must be selected and distributed based on:

- the classes of anticipated workplace fires, and
- the size and degree of hazard which would affect their use.

Portable fire extinguishers must be distributed for use by employees so that the travel distance for employees to any Class B extinguisher is 50 feet or less, and to any Class A or Class D extinguishers 75 feet or less. [Class D fire extinguishers have little or no use in agriculture. A-B-C fire extinguishers are popular and should be located within 50 feet or less.]

The employer must distribute portable fire extinguishers used for Class C hazards on the basis of the appropriate pattern for the existing Class A or Class B hazards.

The employer may use uniformly spaced standpipe systems, or hose stations connected to a sprinkler system, installed for emergency use, instead of Class A portable fire extinguishers, provided that such systems provide total coverage of the area to be protected, and that employees are trained at least annually in their use.

INSPECTION, MAINTENANCE AND TESTING

- The employer is responsible for the inspection, maintenance and testing of all portable fire extinguishers in the workplace. Portable extinguishers (or hose) must be visually inspected monthly.
- The employer must assure that portable fire extinguishers are given an annual maintenance check. (Stored pressure extinguishers do not require an internal examination.) The employer must record the annual maintenance date and retain this record for one year after the last entry or for life of the shell, whichever is shorter.
- The employer must assure that stored pressure dry chemical extinguishers that require a 12-year hydrostatic test are emptied and subjected to

applicable maintenance procedures every 6 years. (Dry chemical extinguishers having non-refillable disposable containers are exempt from this requirement.) When recharging or hydrostatic testing is performed, the 6-year requirement begins from that date.

- The employer must assure that alternate equivalent protection is provided when portable fire extinguishers are removed from service for maintenance and recharging.

EVIDENCE OF TESTING

The employer must maintain, and provide upon request, evidence that the required testing of fire extinguishers has been performed at the proper time intervals. The evidence must be a certification record which includes the date of the test, the signature of the person who performed the test and the serial number, or other identifier, of the fire extinguisher that was tested. These records must be kept until the extinguisher is retested or taken out of service.

TRAINING AND EDUCATION

Where the employer has provided portable fire extinguishers for employee use in the workplace, he or she must also provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with fighting incipient fires. The employer must provide this education upon initial employment and at least annually thereafter.

If an employer has developed an emergency action plan, then only those employees designated to use fire fighting equipment need to be trained in the use of the appropriate equipment. This training is required upon initial assignment to this designated group of employees and at least annually thereafter.